

# Bay Area Approach to Regional ITS Architecture: How Can We Make It Work?

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# Agenda

- History, Background
- Current Status
- Issues and Challenges


# History & Background

- **Early Deployment Plan 1996** ("pre-Architecture")
- **Many regional projects**
  - TravInfo®, 511, TransLink®, "Take Transit"/TransitInfo, SAFE callboxes and FSP
  - Caltrans TOS, FasTrak
  - Freeway Management Plan
- **Many local/corridor projects**
  - Traffic signal coordination, traffic surveillance
  - Transit automatic vehicle location, passenger information

# Complex Institutional, Funding Environment: “We Are Not Alone”

- 9 counties, 101 cities, 26 transit agencies
- County Congestion Management Agencies
- County Sales Tax Authorities
- Bay Area Regional Partnership
- No regional “ITS” funding program, few earmarks
- Big emphasis on system management and customer service projects

# Current Status

- **Two-phased approach**
  - Phase I (started late 2001)
    - Inventory, assessment
  - Phase II (target mid-2003)
    - Strategic deployment/integration plan
    - Architecture
- **Both phases**
  - Outreach/coordination
  - Technical assistance
-  We'll get the documents done, but how do we make it work?

# How Can/Should ITS "Fit In" to Regional Transportation Planning?

- **Depends who you are:**
  - Cheerleaders/true believers: ITS is *the* answer to transportation problems
  - Skeptics/doubters: ITS is a set technology toys looking for a problem to solve
- ➡ ITS ***supports*** system management & operations
- **Limitations & Constraints:**
  - No natural constituency
  - Victim of early over-selling
  - Early baggage of terminology, jargon, "IVHS," "defense conversion"
  - Benefits not well understood, costs very real

# Necessary Conditions for ITS to Fit into Regional Planning

- It has to work
- It has to present viable alternative and complementary solutions to “normal” transportation projects
- It has to present realistic total costs
- It has to face realities of transportation planning and programming

# Reality Check: ITS vs. "Real World" of Planning & Programming

- Resource competition
- Staff capabilities, culture, leadership
- Back-logs, over programming
- Delivery inexperience, risk aversion
- Short-term focus
- External political environment
- Mismatch of institutions, problems
- Policy by poll

# Challenges Facing the Regional ITS Architecture Project

- **Managing expectations**
  - Results
  - Impacts
- **Keeping focus**
  - Not all technologies
  - Not all right now
- Building a lasting foundation, with built-in change mechanisms

# So, Now You Have a Regional Architecture?

- What do you do next? “Mainstreaming” mantra, but what does it mean?
- ★ ITS as integral part of regional & project planning, not an add-on
- ★ Sufficient technical expertise (inside or contracted) to assist in project development, confirm “consistency” (whatever that means locally)
- ★ Commitment to maintain, enhance architecture
- ★ Commitment to support lifecycle of ITS projects

# Top Five Reasons...

- **Regional architectures could *hurt* ITS deployment:**
  - Sounds bureaucratic
  - Perceived to limit flexibility
  - Perceived to impose costs, delays
  - Perceived to be too theoretical
  - Perceived to be created by computer geeks

# Top Five Reasons...

- **Regional architectures could *help* ITS deployment:**
  - Provide on-going forum that crosses boundaries
  - Address all the “glue” to hold the project pieces together, catch what falls between the cracks
  - Provide value to current and planned projects, esp. standards & protocols
  - Provide on-going support to help agencies up the technology learning curve

# Wrap Up: Realities Architecture Must Address

- Architecture cannot be drawn on a blank slate (“legacy systems” will be long-term reality)
- System maintenance, management, safety and operations strategies are planning focus areas ITS can support, but...
- Uneasy alliances need to be strengthened
  - ITS must show it is a complementary partner, providing value, not just another competitor

# Questions

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